



# 38 Years of Product Innovation

**Recognized Global Leader in Anti-Fog Coating Systems** 





### **FSICT Presentation**





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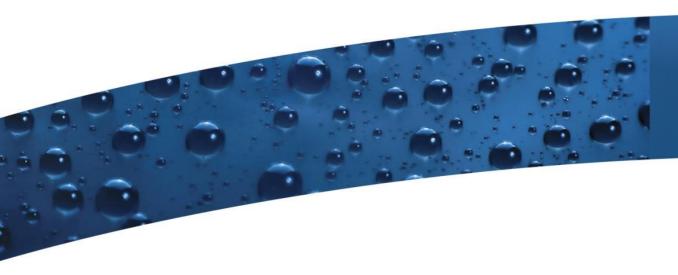
### Summary

- Leveraged Technology Partnership
- Enhanced Product Performance
- Global Distribution & Support



# Our Company

Established in 1986



**38 YEARS OF PRODUCT INNOVATION** 

### **FSICT At A Glance**





### 38 Years of Innovation

- 1986 Established as Film Specialties, Inc. to develop effective anti-fog and abrasion resistant coatings
- 2010 Acquired by SDC Technologies, Inc., (SDC) a subsidiary of Mitsui Chemicals, Inc.
- 2010 Renamed FSI Coating Technologies, Inc., rebranding of FSICT included new website at fsicti.com
- 2011 Expansion with West Coast California relocation
- 2012 Launched Visgard® Premium LFT-300 Film & Visgard Premium Plus Anti-fog coating
- 2013 Opening SDC Technologies Asia-Pacific Singapore office
- 2016 Launched Visgard Premium and Visgard Elite Anti-Fog coatings
- 2017 SDC completed acquisition and merger by integrating LTI Coating Technologies UV-Cure coatings and equipment into its business group
- 2020 SDC acquired COTEC® GmbH thin film & coatings technology
- 2021 Launched Visgard UV Anti-Fog coatings UV-Cure coatings and equipment
- 2022 SDC acquired Coburn Technologies, Inc., leader in ophthalmic equipment, consumables, and services in all phases of lens production.
- 2024 Launched Visgard Ultra PFAS-free anti-fog coating

# **FSI Coating Technologies Profile**



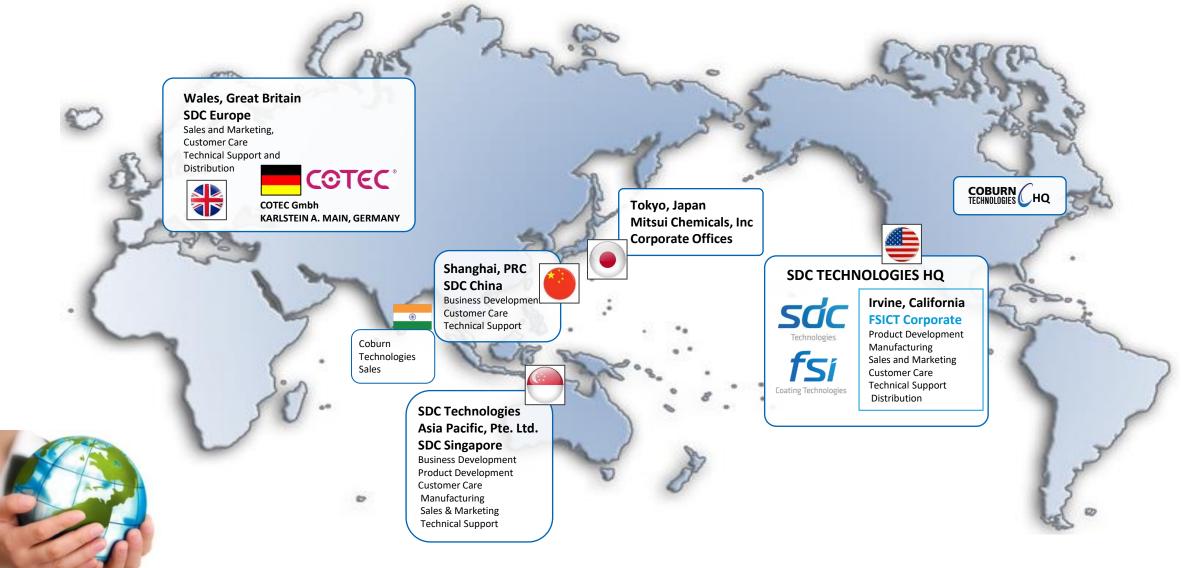


## Pioneering Anti-Fog Technology

- Global Leader in premium anti-fog and abrasion resistant coating systems and film
  - Leveraging the integration of nanotechnology with sol-gel chemistry
- Cutting-edge research and proprietary, patented technologies
  - Advancing the science of anti-fog condensation control
- Unique coating solutions for a variety of substrates
- Support for multiple vertical markets
- Worldwide distribution network

# **Global Footprint**





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## **Core Competencies**





# Advanced Technology Global Distribution & Support

### Technology/Product Development

- Elite team of Senior Chemists dedicated to discovering new technologies
- World-class, cost-effective coatings with long product life

### Manufacturing/Distribution

- In-house specialty manufacturing for both large and small quantities
- Streamline supply-chain complexity and accelerate time-to-market
- Global just-in-time (JIT) distribution

### Global Technical Support/Customer Care

- Experts in technical application consulting, ensuring high yields
- Access to state-of-the-art equipment for lab-scale feasibility studies
- Dedicated, responsive support to ensure a high-quality, consistent experience

# **Quality and Safety**





# Corporate Stewards of Environmental Sustainability & Safety





### **Quality Policy**

- Pursue quality and safety in all endeavors
- Continuously improve our processes and products

### Safety Policy

- Compliant with all local/international packaging & shipping regulations
- Participate in external surveillance and internal certification audits

### **Environmental Sustainability**

- Manufacture environmentally friendly and energy efficient coatings
- Advocate bringing safe and innovative products to the marketplace

## Vision and Mission





### Core Business Initiatives



### **Our Vision**

- To create value through customer partnerships
- Deliver uncompromising service
- Promote diversity and environmental responsibility



### **Our Mission**

- To provide premium functional coating technologies
- Focus on improving product performance & durability
- Continual development of a new generation of coatings

### **Our Values**





# Promoting Innovation Committed to Creativity

- Respect and value people and the planet
- Develop and support passionate, imaginative and enterprising thinking
- Inspire integrity and empower responsibility
- Engage and embrace a diverse and respectful workforce
- Lead by example, constantly identifying areas for improvement
- Continually create innovative global product solutions
- Community commitment, support for charitable organizations

## Code of Business Conduct





Honesty, Respect, Confidentiality & Compliance



- Customer focused, dedicated to developing innovative high-quality products and services
- Confidentiality, non-disclosure of company, supplier and customer information (NDA's)
- Ethical acquisition and use of business intelligence
- Respect for third-party intellectual property
- Fair competition and trade practices
- Environmental conservation
- Health and safety protection

## **Business Environment Trends**





### Customer Needs – Competitive Advantage

### **Global Consistency**

- Worldwide presence
- Brand support

### Leading Edge Technology

- Continuous innovation
- Differentiated performance

### **Efficient Value Chain**

- Fewer suppliers
- Cost-effective solutions
- Flexible, adaptive supply base
- Application expertise





# Markets

**Commercial, Industrial & Medical** 



**38 YEARS OF PRODUCT INNOVATION** 

### Markets Served











- Anti-Fog Film Applications
- Architectural & Building
- Automotive & Transit
- Aviation & Aerospace
- Bathroom Mirror & Shower Door
- Commercial Freezer Display Cases
  - PET Film & Industrial Sheet

- Electronics
- Greenhouse Anti-Fog Film
- Marine & Watercraft
- Medical & Safety
- Military & Security
- Specialty & Custom Applications
- Sunglass & Sports Eyewear

## **Anti-Fog Film Applications**





# Enhancing Visual Clarity & Personal Safety





### **Features**

- Pre-cured coat-film delivers permanent Anti-Fog performance
- Water-washable hard coatings & films
- Highly durable, abrasion, scratch, chemical, mar, impact & UV resistance
- Exceptional optical clarity enables safer driving & navigation
- Weatherable, will not discolor with exposure to sunlight
- Compatible with adhesives & anti-reflective (AR) coatings
- Improves safety, encapsulating and reducing occurrence of shattering glass
- Easy to install, Anti-fog surface with water clear masking release liner protects the coated surface during installation
- Easy to maintain with household ammonia-free glass cleaners

- Automotive & Transit: windows, windshields & windscreens, instrument gauges
- Bathroom: Mirrors, windows, shower & steam room doors, saunas
- Commercial Freezer: Display & Delhi cases
- Electronics: HUD, LED & outdoor digital billboard displays





## **Architectural & Building**





# Innovative Energy Efficient Coatings & Film





#### **Features**

- Water-washable hard coatings & films
- Excellent resistance abrasion, scratch, chemical, fog, impact, mar & UV radiation
- Exceptional optical clarity & printable surface
- Premium weatherability & outdoor durability
- Tintable, compatible with adhesives, AR coatings & mirror treatments
- Improves safety, encapsulating & reducing occurrence of shattering glass

- Canopies, curtains/walls, domes
- Doors, enclosures, lights
- Panels, walkways, windows





### **Automotive & Transit**





# High-Performance Solutions Improving Durability & Optical Clarity





### **Features**

- Water-washable hard coatings & films
- Anti-Fog, abrasion, scratch & chemical resistance
- Exceptional optical clarity enables safer driving & navigation
- Premium weatherability, outdoor durability & UV protection
- Tintable, compatible with adhesives, AR coatings & mirror treatments
- Improves safety, encapsulating & reducing occurrence of shattering glass

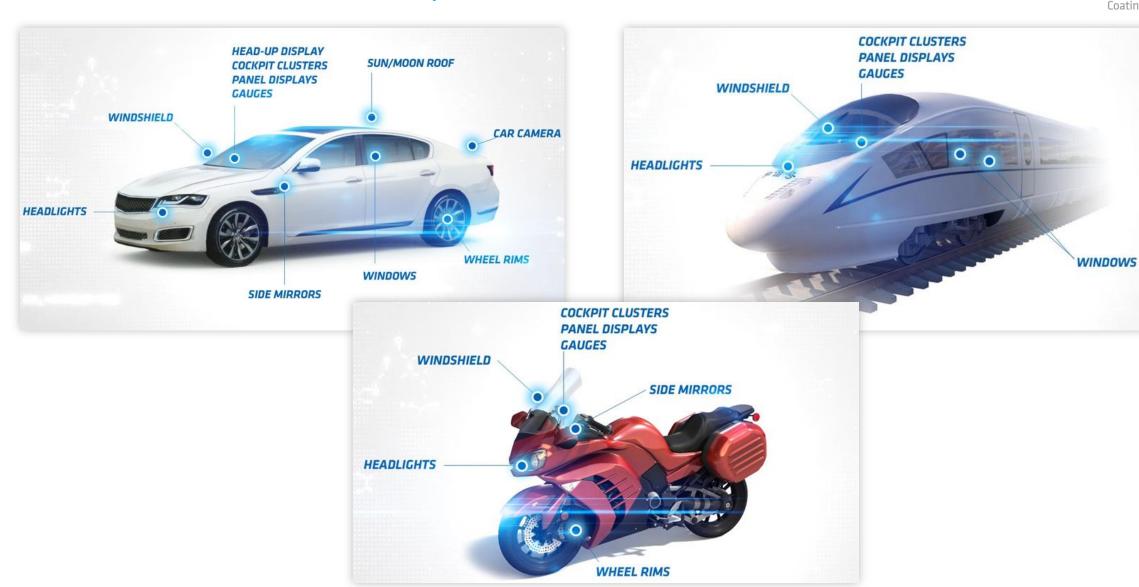
- Automotive & Transit: windows, side mirrors & camera systems, windscreens & windshields, canopies, lights, sun/moon roofs, cockpit instrument clusters, panel displays & gauges
- Electronics: Head-up displays, GPS navigation systems, LED lighting





# **Automotive & Transit Components**





# Aviation & Aerospace





# Promoting Visual Clarity & Personal Safety





#### **Features**

- Water-washable hard coatings & films
- Anti-Fog, abrasion, scratch, chemical, impact & UV resistance
- Exceptional optical clarity enables safer driving & navigation
- Premium weatherability & outdoor durability
- Tintable, compatible with adhesives & AR coatings
- Improves safety, encapsulating & reducing occurrence of shattering glass

- Aviation: windows, windshields, canopies, lighting, cockpit instrument clusters, panel displays & gauges
- Electronics: Head-up displays, GPS navigation systems, LED lighting
- Eyewear Protection: Goggles, face shields, visors, space helmets





## **Bathroom Mirrors & Shower Doors**





# Convenience & Safety in Grooming routines





#### **Features**

- Water-washable hard coatings & coated films in 2 and 4 mil thickness
- Available with or without pressure sensitive application to flat glass and polycarbonate surfaces
- Anti-Fog, abrasion, scratch, chemical, impact & UV resistance
- Exceptional optical clarity enables safer grooming routines

#### **Benefits**

- Chemical resistant, can be cleaned with common household glass cleaners
- Permanent anti-fog treatment, a superior solution to temporary sprays and gels

- Residential and commercial bathroom shaving, vanity and powder mirrors
- Shower and steam room doors, saunas, and windows

## **Commercial Refrigeration**





# Anti-Fog Film for Cooler & Freezer Display Cases





#### **Features**

- Superior permanent, water washable Anti-Fog performance
- Highly effective and long-lasting condensation control
- Durable even under humid and wet conditions.
- Printable surface, can be digitally printed upon for advertising
- Highly durable, abrasion, scratch, mar, chemical & UV resistance

#### Benefits

- Easy to install & maintain with common household glass cleaners
- Optically clear, improving visual merchandising
- Supports environmental leadership and sustainability initiatives
  - Optimizes efficiency, reducing energy consumption of freezer/compress or operations

## **Electronics**





# Maximizing the Durability & Performance of a Digital Lifestyle



#### **Features**

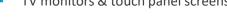
- Anti-Fog, abrasion, scratch, chemical, impact & mar resistance
- Excellent weatherability, outdoor durability & UV protection
- Exceptional optical clarity, extremely hydrophilic & hydrophobic for 100% visibility
- Printable film surface for branding & advertising
- Tintable, easy to clean & highly durable wear resistance
- PET Film compatible with adhesives



- Cameras, GPS systems, smart phones, watches
- Computers, PCs, PDAs, notebooks, tablets
- Digital outdoor billboard signage & kiosks
- Electronic control panels, appliances & handled devices
- HUD, Flat Panel Display (FPD), LED, LCD (plasma screens), OLED
- TV monitors & touch panel screens







### Greenhouse





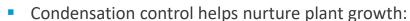
# Anti-fog Coated Film Improves Plant Quality & Growth



### **Features**

- Condensation can lead to plant damage, disease, scorching and reduced light transmission in a greenhouse or conservatory.
- Anti-fog coated film supports a healthier, more productive growing environment for plants
- Non-yellowing, optically clear, anti-fog controls condensation
- Provides superior water sheeting surface on greenhouses and conservatories
- Helps to control light transmission to enhance growth conditions
- Hydrophilic with anti-fog additives, enables water to migrate from the surface so water sheets off it, removing all traces of fog.





- 15-50% more light transmission
- Higher crop yields, quality, and commercial value
- Earlier harvesting
- Fewer diseases and reduced need for pesticides



### Marine & Watercraft





## Improving Visibility & Durability





### **Features**

- Exceptional optical clarity for safer driving and navigation
- Premium weatherability and outdoor durability
- Excellent resistance to abrasion, chemicals, impact and UV radiation
- Hydrophilic, water sheeting anti-fog properties
- Primer-free adhesion to polycarbonate and acrylic substrates
- Tintable and printable surface

- Electronics: Panel and Heads-up Displays (HUD), LED lighting
- Hullside and boat deck windows, windshields, and windscreens
- Navigation: GPS navigation systems, cockpit instrument clusters and gauges





# Medical & Safety





# Permanent, Water-Washable Anti-Fog Solutions





### **Features**

- Highly durable, abrasion, scratch, chemical, impact & UV resistance
- Permanent, water-washable Anti-Fog coatings & films
- Exceptional optical clarity, extremely hydrophilic & hydrophobic for 100% visibility
- Easy to clean, excellent wear resistance & outdoor durability
- Tintable, compatible with mirror & anti-reflective (AR) treatments
- Provides superior impact protection to bullet/shatter proof glass
- Improves safety, encapsulating & reducing occurrence of shattering glass
- Meets or exceeds safety standards for fog, abrasion & UV protection

- Automotive &Transit: Armored & security vehicle windshields, windows & doors
- Medical: Electronic display panels, surgical camera equipment, cardiovascular stints & vascular implant devices
- Protective Safety: Eyeglasses, face shields, masks, goggles & visors





# Military & Security





# Applications Where Visual Clarity is Imperative





### **Features**

- Highly durable, abrasion, scratch, chemical, impact, mar & UV resistance
- Permanent, water-washable Anti-Fog coatings & films
- Exceptional optical clarity, extremely hydrophilic & hydrophobic for 100% visibility
- Easy to clean, excellent wear resistance & outdoor durability
- Tintable, compatible with mirror & AR treatments
- Provides superior impact protection to bullet/shatter proof glass
- Improves safety, encapsulating & reducing occurrence of shattering glass
- Meets or exceeds safety standards for fog, abrasion & UV protection

- Protective Safety: Eyeglasses, face shields, masks, goggles & visors
- Optical Equipment: Binoculars, rifle/night/laser scopes, surveillance cameras
- Aircraft: Canopies, cabin windows, cockpit instrument clusters
- Automotive &Transit: Military vehicle windshields, windows, instrument gauges & guidance systems





## Sunglass & Sports Eyewear





## Superior Anti-Fog Performance





#### **Features**

- Highly durable, abrasion, scratch, chemical, impact, mar & UV resistance
- Permanent, water-washable Anti-Fog coatings & films
- Exceptional optical clarity, extremely hydrophilic & hydrophobic for 100% visibility
- Easy to clean, excellent wear resistance & outdoor durability
- Tintable, compatible with anti-reflective, mirror & metalizing treatments
- Meets or exceeds safety standards for fog, abrasion & UV protection

- For Application to tinted and clear substrates
  - Polycarbonate, polyamide (optical nylon), cast resins & acrylic
- Ophthalmic Lens Prescription Eyewear
- Protective & Safety Eyewear Devices (eye glasses, face shields, masks goggles & visors)
- Sunglass & Sports Eyewear (shields, masks, goggles, visors)

# **Specialty & Custom Applications**





Simple to Complex
Design & Production Assistance

- Support team to assist with initial production and design
- Expert sciences review requirements for the best product fit
- Ability to develop customized coating formulations
- Contract manufacturing services available for:
  - Appliqué shapes & perimeter adhesion
  - Custom die-cut lenses
  - Specialized laminations & metalized tinted films



# **Products**

**Anti-Fog Coatings, Film & Sheet, Formable, Specialty** 



**38 YEARS OF PRODUCT INNOVATION** 

## **Products Overview**





Product Solutions to Improve "YOUR" Brand

- Anti-Fog Product Suite
- Anti-Fog Film & Sheet Product Suite
- Anti-Fog PET Film Products
- Formable Coatings Product Suite
- Specialty & Custom Applications
- UV-Cure Anti-fog Coating

## **Coating Features**





### **Innovative Product Solutions**



- Anti-Fog
- Highly Abrasion & Scratch Resistant
- Chemical & Impact Resistant
- A/R (Anti-Reflective) Compatible
- Environmental Stability
- Flexible
- Hydrophilic & Hydrophobic
- Optical Clarity
- Thermal & UV-Cure Coatings
- Tintable
- Water Sheeting

### **Production Benefits**





# Enhanced Product Performance & Quality

- Easily integrate into your existing operations, requires no-premixing
- Improves product performance, utility, appearance & quality
- Primer-free product offerings accelerate production
- Environmentally friendly options available
- Easy to use and highly stable products, can be stored at room temperatures
- Cost-effective long product service life reduces frequent tank change outs
- Multi-substrate compatible coatings streamline manufacturing, improving yields and profitability
- Access to FSICT's global tech support team for product validation & application

## **Substrate Materials**





## **Multiple Applications**





- Acrylic
- Aluminum & Other Non-Ferrous Metals
- Glass
- PET Film & Sheet
- Polyamide (Optical Nylon)
- Polycarbonate & Other Plastics

# **Part Types**





## **Multiple Coating Applications**



- Cast
- Fabricated Plastics, Metal & Glass
- Forged & Non-Ferrous Metals
- Injection Molded
- Plastic Film & Sheet







# **Coating Categories**





## **Multiple Product Options**





- Anti-Fog (Water-Washable)
- Formable
- Hard Coating
- Multi-Purpose
- Primer & Primer-Free
- Thermal & UV-Cure

## **Coating Application Methods**











- Dip
  - Two-sided coating provides high throughput and the ability to maintain thickness control
  - Ideal for lenses and small parts
- Flow
  - Effective for large or uniquely shaped parts
  - Well suited for plastic sheeting and large shapes
- Laminate
- Roll-to-Roll
  - One-sided coating, ideal for UV-cure coatings
  - Ideal, continuous process for film and sheet
- Self-Adhesive Film
- Spin
  - One-sided coating features good thickness control
  - Perfect for lenses
- Spray
  - One-sided coating ideal for large or complex parts, offers high throughput
  - Applications include cell phone windows and casings

## **Anti-Fog Product Suite**





## World-Class Anti-Fog Coatings

### **Applications**

- Safety/Military/Sports/Sunglass Eyewear & Swim Goggles
- Industrial Sheet & PET Film for Freezers
- Instrument Gauges/Panels/Clusters

#### **Features**

- Single and double coat systems
- Primer, primer-free & water-based options
- Thermaformable and flexible
- Anti-fog (permanent), abrasion, impact & chemical resistant
- Compatibility with mirror coating treatments (AF-6114)
- Dip, flow, roll & spray coat compatible
- Thermal & UV-cure options

### **Anti-Fog Product Options**

- Polysiolxane
  - Non-Water washable & waterwashable
- Urethane
  - Permanent water-washable, EN-166/EN-168 compliant
  - Hydrophobic & hydrophilic
  - Superior water-sheeting properties



## Anti-Fog Film & Sheet





# Commercial, Industrial & Medical Applications



#### **Markets Served**

- Architectural & Building (Conservatory/Greenhouse, Mirrors)
- Automotive & Transit (Aerospace, Bus/Coach, Marine, Motorcycle, Rail)
- Commercial Freezer Display Cases
- Electronics (HUD, LED, Digital Billboard Displays)
- Medical & Safety

#### **Features**

- Film Applications: Glass, PET Film & Sheet, PC
- Anti-fog, abrasion, impact and chemical resistant
- Excellent formability

### **Available Options**

- Permanent anti-fog coated film with or without pressure sensitive adhesive
- Anti-fog film for single-use, disposable products
- Standard rolls & customized appliqués

## Anti-Fog PET Film





# Commercial & Industrial Applications



#### Markets Served

- Architectural Glazing
- Bathroom & Shower Mirrors
- Commercial Freezer & Delhi Display Cases
- Industrial Safety & Sports Visors, Eyewear & Masks
- Instrumental Crystal & Display Lenses

#### **Features**

- Film Applications: Glass, PET Film & Sheet, PC
- Permanent anti-fog with superior abrasion resistance
- Exceptional optical clarity & consistency

### **Available Options**

- Permanent anti-fog coated film with or without pressure sensitive adhesive
- Anti-fog film for single-use, disposable products
- Standard rolls & customized appliqués

# Formable Coating Product Suite





# Exceptional Abrasion Resistance & Optical Clarity





#### **Markets Served**

- Automotive & Transit
- Architectural & Building
- Electronics
- Protective Eyewear

#### **Features**

- Outstanding Abrasion, Scratch & Chemical Resistance
- Formable, Flexible & Tintable
- Optically Clear, Permanent Anti-Fog Performance
- Will Not Discolor with Exposure to Sunlight
- Adhesion to PC, PMMA, CR-39<sup>®</sup>, Nylon & Other Plastics

### **Available Options**

- Thermal Cure
- Single & Double Coat Systems
- Flow & Dip Coat Compatible





## **UV-Cure Coatings**





# Performance Powered by Sustainable Chemistry





### **Markets Served**

- Ophthalmic Eyewear
- Protective Eyewear: eyeglasses, face shields, masks, goggles and visors

#### **Features**

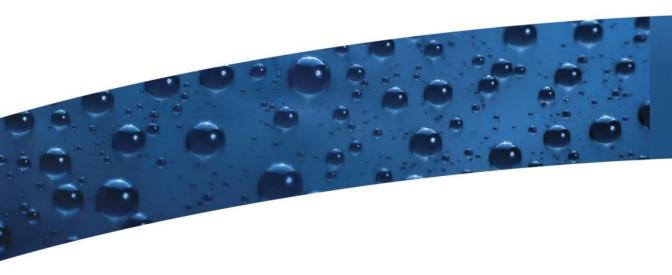
- Outstanding Abrasion, Chemical, Fog, and UV Resistance
- Exceptional optical clarity
- Water washable and water sheeting
- Primer-free adhesion to polycarbonate

### Benefits

- Excellent stability and product durability, extended anti-fog service-life performance
- Eco-friendly, reduced VOC emissions
- Environmentally conscious UV light, energy efficient fast curing
- Good cosmetic appearance, transparent anti-fog, hydrophilic easy clean surface



# Summary



**38 YEARS OF PRODUCT INNOVATION** 

## Global Service & Support





## Strategic Development Partner

- Your strategic product development partner with a common focus on continuous quality improvement
- Dedicated to world-class operations & global customer relationships
- Committed to delivering uncompromising service that exceeds customer expectations
- Localized technical support teams backed by central R&D Department accelerates product development

## **Value Proposition**





## Why Choose FSICT?

- Long and successful record of continuous growth through technical innovation
- Comprehensive portfolio of patented premium anti-fog coatings and films for multiple applications
- FSICT's innovative solutions improve the durability and performance of the world's most recognized products
- Extensive support and distribution network

### **Brand Elevation**





## **Enhancing Product Durability**



- Trusted by the World's Most Prestigious Brands
- From the 2012 Olympic Games swim goggles, to NASA Space Mission helmets, our premium coatings are used to enhance products where high performance is critical.
  - Best-in-class abrasion, chemical, fog, impact and scratch resistance
  - Exceptional optical clarity and environmental durability
- Global Manufacturing Capacity
  - Closely aligned to our global customers to deliver product, service, and support 24x7











# What We Can Do Together is Boundless





### **Innovative Product Solutions**

- Enhance your products' performance and image
- Leverage FSI's proprietary, patented technology
- Rely on consistent, certified products
- Access global JIT delivery and support
- Support partnership for your product:
  - Evaluation
  - Qualification
  - Implementation
  - Commercialization
  - Future development strategies

### **Performance with Chemistry™**



fsicti.com



# 38 Years of Innovation Global Leader in Anti-Fog Coating Systems

